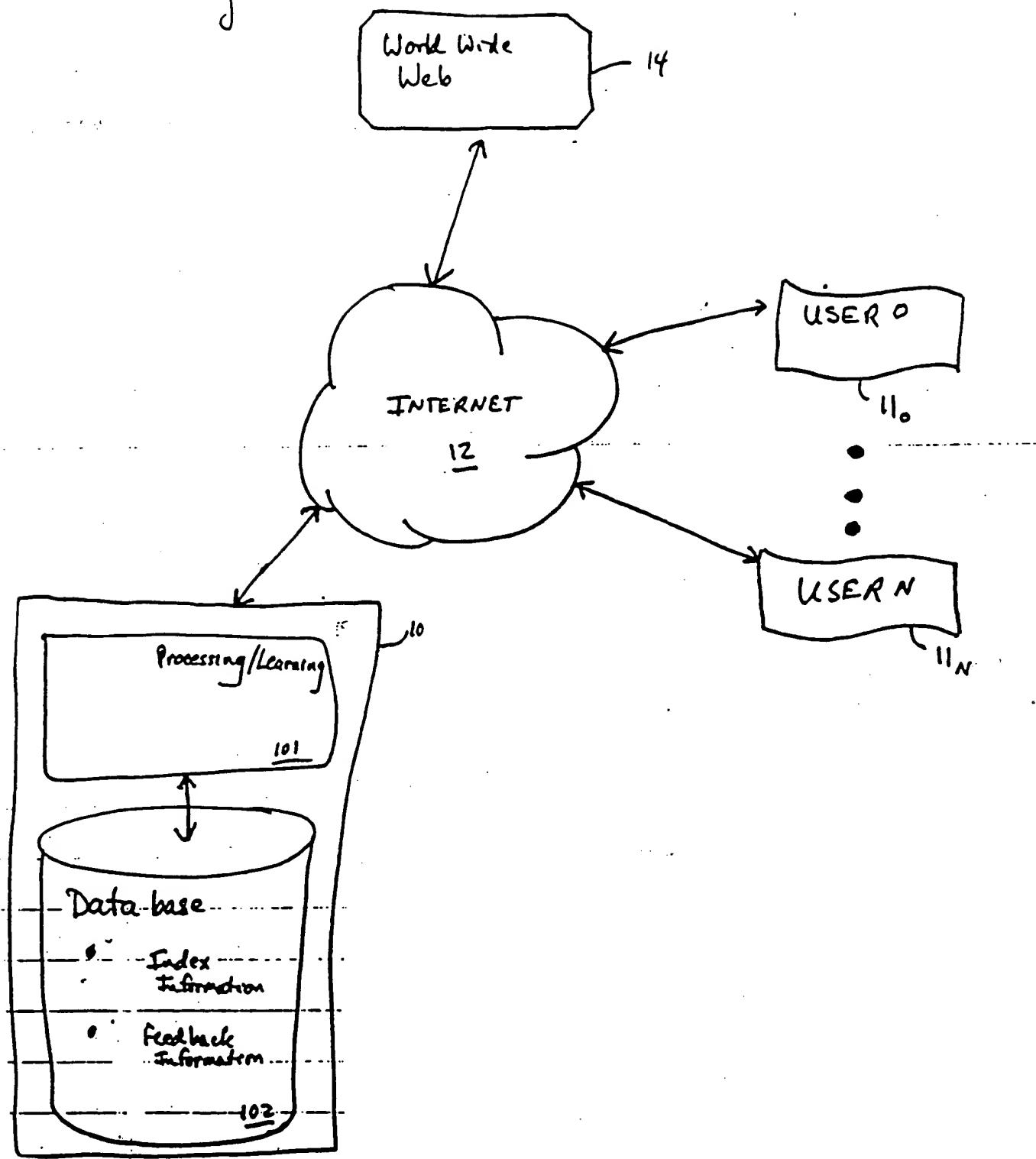


Fig. 1A



Multi-user feedback

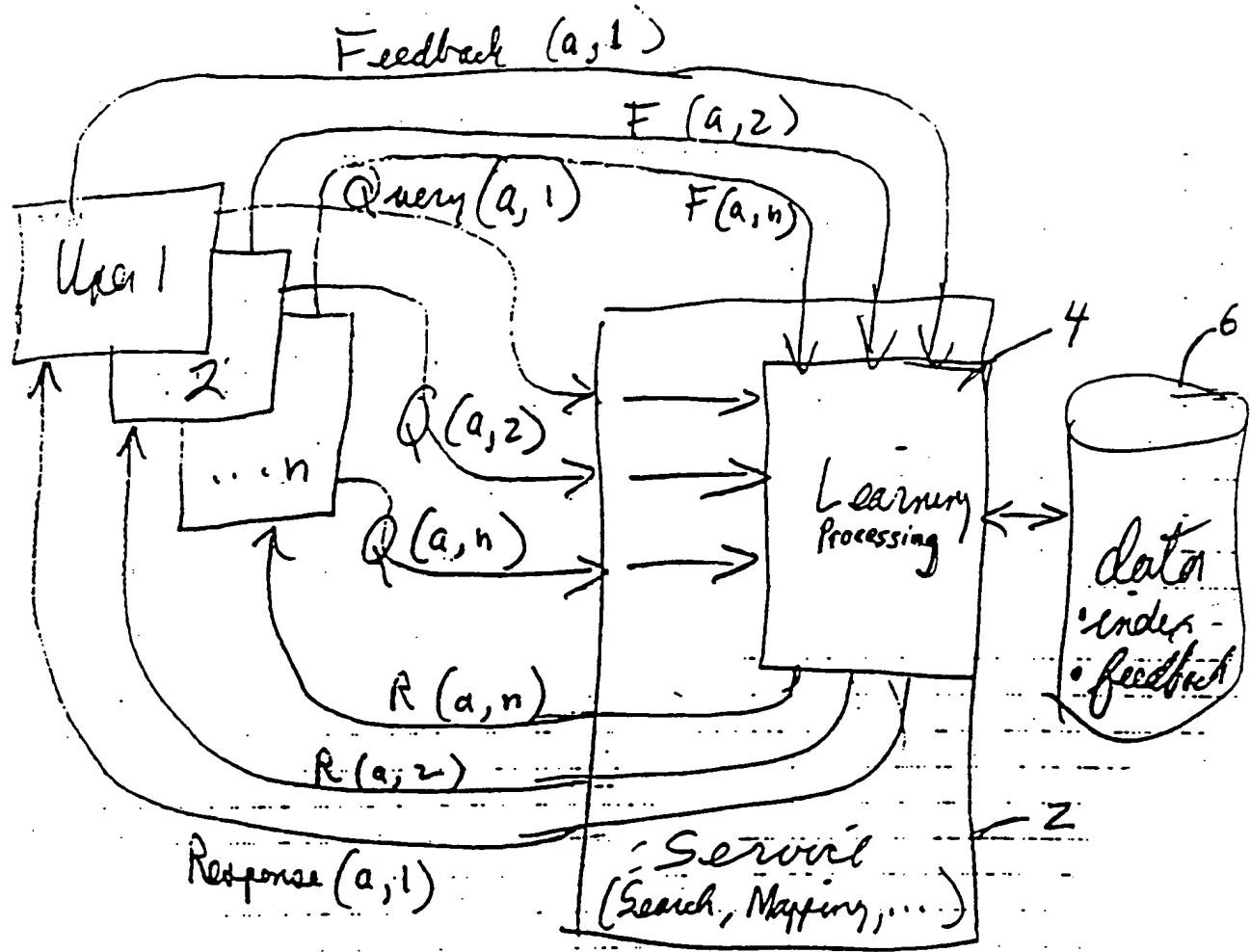
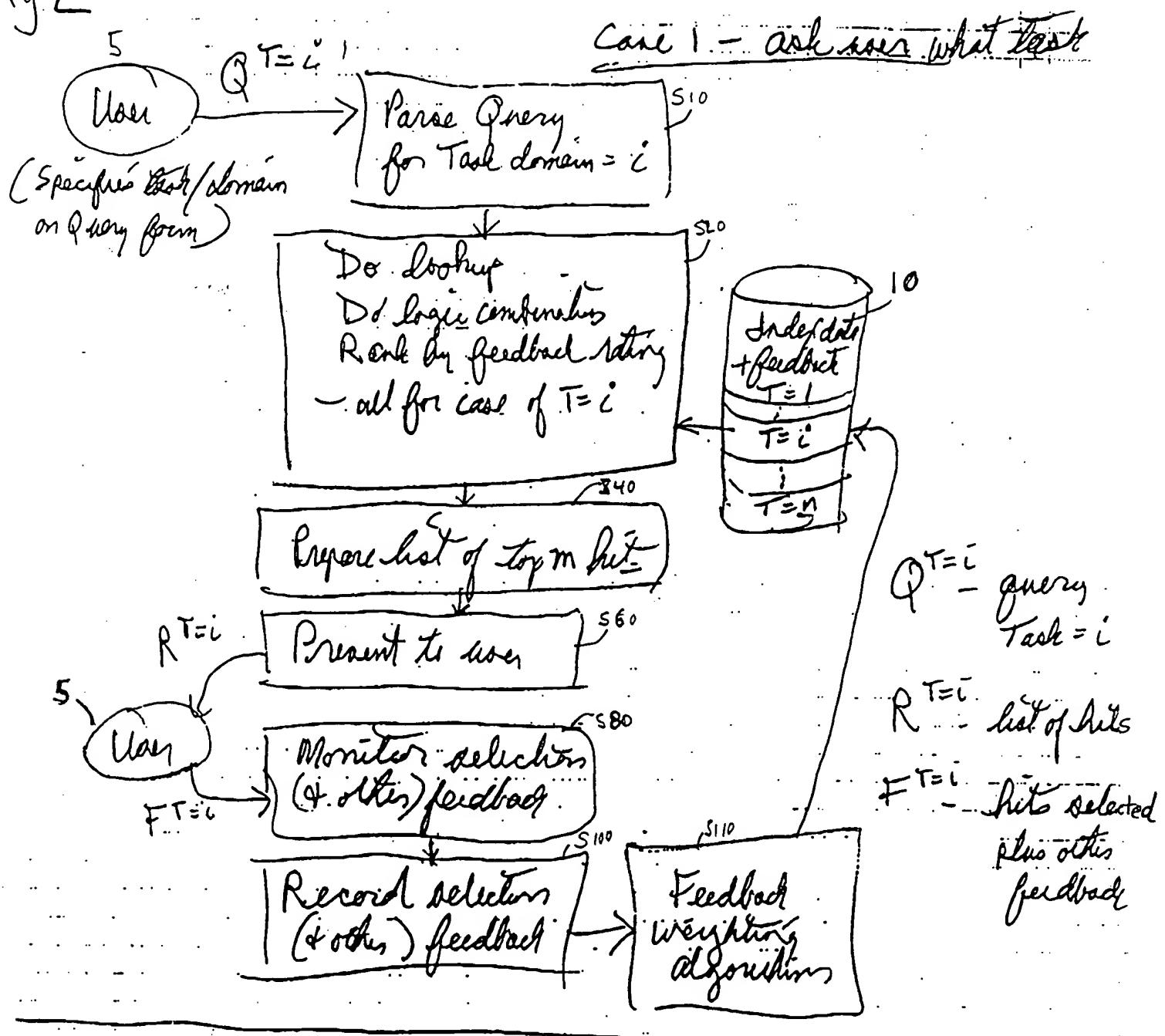


Fig. 1B

Legend:

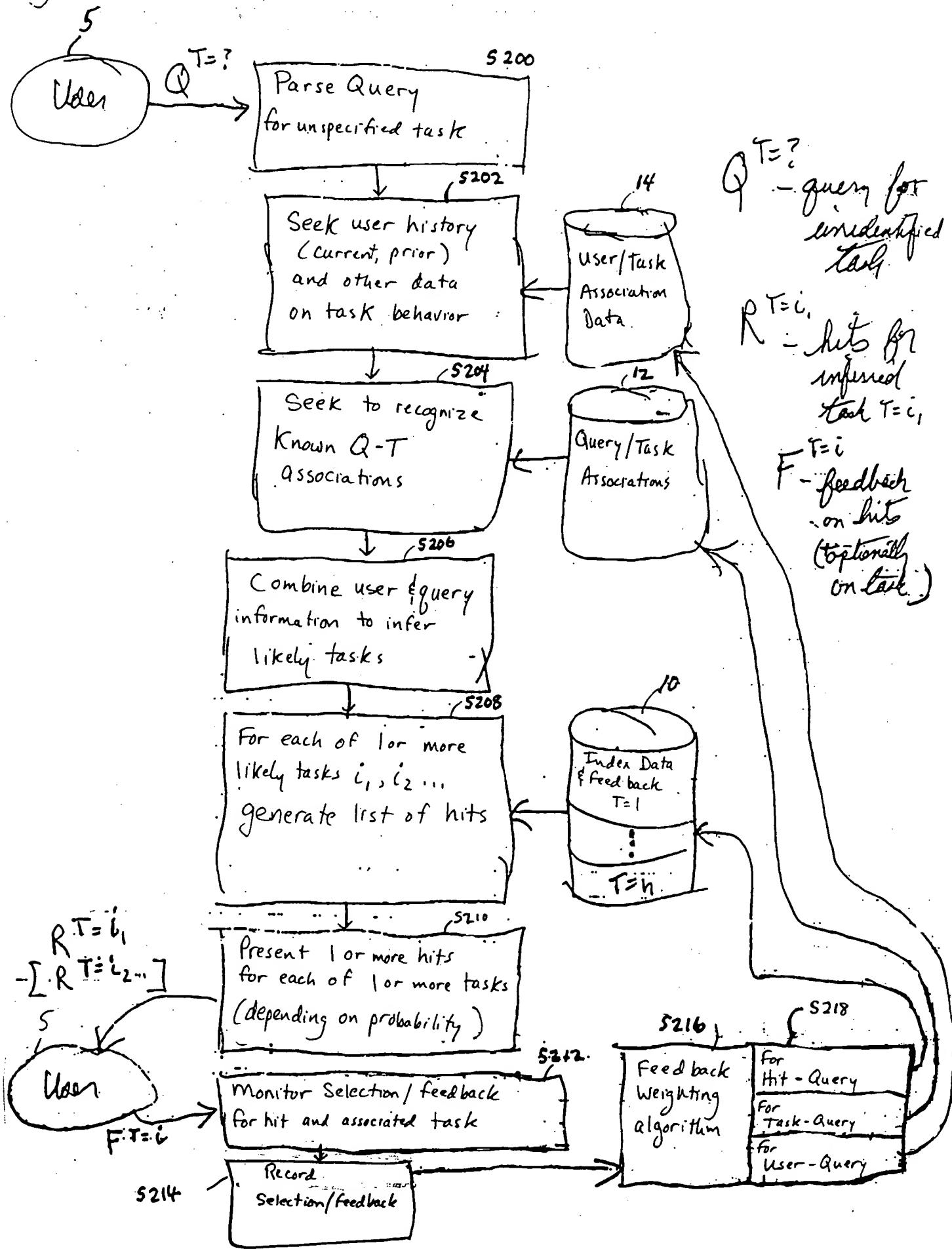
- Q , R , F } = Query item
- $(a, 1)$, $(a, 2)$, ..., (a, n) } = Query or request item, user case-instance
- $(a, 1)$, $(a, 2)$, ..., (a, n) } = Query-response-Feedback results

Fig 2



- * use semantic info & vocabulary to define tasks.
- match task specifications in terms of semantics/vocabulary
- * segment data by task as feedback is obtained
 - start with all data at low probability setting, then adjust as feedback is obtained

Fig. 3



Index Lamp - Task / Domain

(Fig 4)

Tasks $T =$	Q 's $Q(a)$	Pass Targets	Raw score	Epp. And	Probability (Task/domain)
1	Single element $Q(a) \mid 0$	$T_1 \vdots T_2$	$S_{a1} T_1$	$E_{a1} T_1$	$P_{a1} T_1$
1	$Q(b) \mid 0$				
1	Compound $Q(c) \mid 1$				
2	Single $Q(a) \mid 0$				
2	$Q(d) \mid 0$				
2	Compound $Q(e) \mid 1$				
\vdots					
n					
	Single $Q(a) \mid 0$	$T_1 \vdots T_2$	$S_{ax} T_1$	$E_{ax} T_1$	$P_{ax} T_1$
	$Q(f) \mid 0$				
	Compound $Q(g) \mid 1$				
x_1	$Q(a) \mid 0$	$T_1 \vdots T_2$	$S_{ax_1} T_1$	$E_{ax_1} T_1$	$P_{ax_1} T_1$
x_1	$Q(b) \mid 0$				
x_1	$Q(c) \mid 1$				
x_2	$Q(d) \mid 0$				

Unknown tasks \leftrightarrow Known tasks

FIG. 5 A

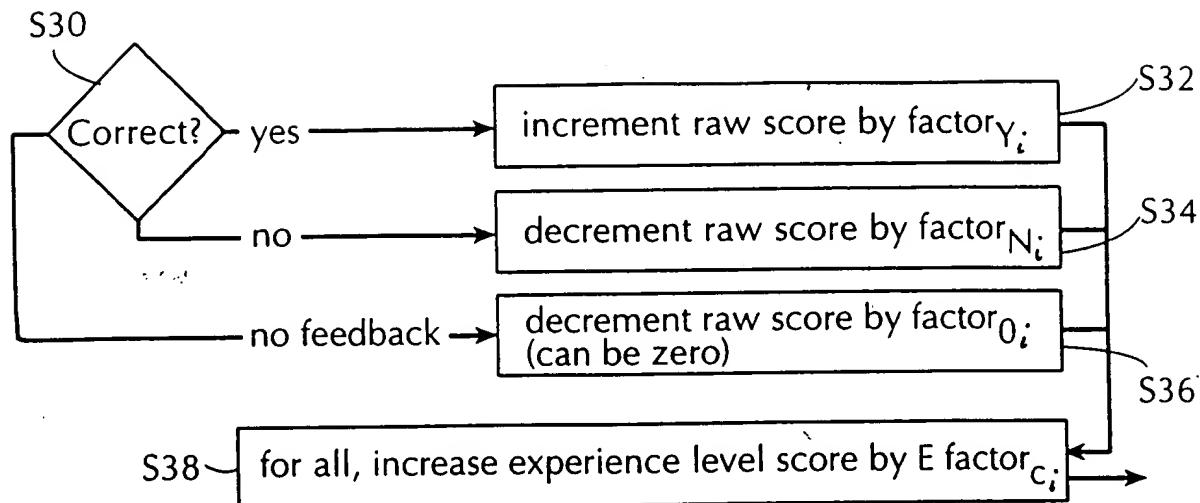


FIG. 5 B

